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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* RICHARD J. FOLIO

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Appeal 2007-3806  
Application 09/896,894<sup>1</sup>  
Technology Center 2600

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Decided: June 26, 2008

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Before ROBERT E. NAPPI, SCOTT R. BOALICK,  
and CARLA M. KRIVAK, *Administrative Patent Judges*.

BOALICK, *Administrative Patent Judge*.

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<sup>1</sup> Application filed June 29, 2001. The real party in interest is Harris Corporation.

## DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134(a) from the final rejection of claims 1-64, all the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

## STATEMENT OF THE CASE

Appellant's invention relates to a supplemental audio content system for providing supplemental audio content to movie patrons in a cinema of a cineplex. (Spec. Abstract.)

Claim 1 is exemplary:

1. A supplemental audio content system for providing supplemental audio content to at least one movie patron during playing of a motion picture film and associated soundtrack in a cinema of cineplex comprising a plurality of individual cinemas, the supplemental audio content system comprising:

a supplemental audio content player for playing supplemental audio content during playing of the motion picture and associated soundtrack;

a wireless transmitter connected to said supplemental audio content player;

at least one earphone to be worn by the at least one movie patron; and

at least one wireless receiver connected to said at least one earphone and cooperating with said wireless transmitter to deliver supplemental audio content to the at least one movie patron;

said wireless transmitter and wireless receiver having operating characteristics to avoid interference with respective supplemental audio content systems for other cinemas of the cineplex.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Karamon	US 5,055,939	Oct. 8, 1991
Denenberg	US 5,375,174	Dec. 20, 1994
Oltman	US 5,822,440	Oct. 13, 1998

Claims 1-13, 15-27, 29-43, 51-61, and 63-64 stand rejected under 35 U.S.C. § 103(a) as being obvious over Karamon and Oltman.<sup>2</sup>

Claims 14, 28, 44-50, and 62 stand rejected under 35 U.S.C. § 103(a) as being obvious over Karamon, Oltman, and Denenberg.<sup>3</sup>

Rather than repeat the arguments of Appellant or the Examiner, we make reference to the Briefs and the Answer for their respective details. Only those arguments actually made by Appellant have been considered in this decision. Arguments that Appellant did not make in the Briefs have not

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<sup>2</sup> The Brief refers in error to claims 1-43 and 51-64 as being rejected over Karamon and Oltman. (App. Br. 6.)

<sup>3</sup> The Brief refers in error to claims 44-50 as the only claims being rejected over Karamon, Oltman, and Denenberg. (App. Br. 6.)

been considered and are deemed to be waived. *See* 37 C.F.R. § 1.192(c)(7) (2003).<sup>4</sup>

## ISSUE

The issue is whether Appellant has shown that the Examiner erred in rejecting the claims under 35 U.S.C. § 103(a). The issue turns on whether Karamon and Oltman teach or suggest a wireless transmitter connected to a supplemental audio content player, whether Karamon and Oltman teach or suggest a wireless receiver connected to an earphone that has operating characteristics to avoid interference with respective supplemental audio content systems for other cinemas in a cineplex, and on whether the teachings of Karamon and Oltman properly may be combined.

## FINDINGS OF FACT

The record supports the following findings of fact (FF) by a preponderance of the evidence.

1. Karamon describes a system that correlates an audio message of an auxiliary sound track with an audio message from a sound track of a motion picture film. (Abstract; col. 1, ll. 16-27; col. 3, ll. 1-11.) The

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<sup>4</sup> We cite to the rule that was in effect at the time the instant Appeal Brief was filed on June 2, 2003. The present rule is found at 37 C.F.R. § 41.37(c)(1)(vii)(2007). Except as will be noted in this opinion, Appellant has not presented any substantive arguments directed separately to the patentability of the dependent claims or related claims in each group. In the absence of a separate argument with respect to those claims, they stand or fall with the representative independent claim. *In re McDaniel*, 293 F.3d 1379, 1383 (Fed. Cir. 2002); *see also* 37 C.F.R. § 1.192(c)(7) (2003).

auxiliary source contains multiple language channels or "translation sound tracks." (Abstract; col. 1, ll. 34-41; col. 3, ll. 49-56.) In the system of Karamon,

each of the translation sound tracks is available to be selected for listening by a cinema audience or by segments of the cinema audience sitting in pre-selected seating areas having listening devices assigned to respective languages (or selected by an individual viewer in a theater or at home desiring to hear a particular language furnished by a particular one of the available synchronized translation sound tracks).

(Col. 1, ll. 48-55.) The system of Karamon can be applied to monaural sound signals and also to multi-channel "surround" sound signals. (Col. 6, ll. 26-30.)

2. Oltman describes an audio system with a wireless headphone that includes a transmitter and a receiver. (Abstract; col. 1, ll. 11-17; col. 3, ll. 32-37.) The transmitter broadcasts a Direct Sequence Spread Spectrum (DSSS) CDMA signal on a number of separate code channels. (Abstract; col. 3, ll. 38-41.) Oltman teaches that "it will be understood by those having skill in the art that the number of channels may be chosen depending on the size of the particular venue to be serviced and the range of accuracy sought." (Col. 8, ll. 24-28.) Using the system of Oltman, individuals at a concert, show, or speaking engagement may roam within a predetermined area. (Col. 1, ll. 14-17, 39-42.)

3. Denenberg describes a wireless headset that may use either radio-frequency (RF) or infrared (IR) communication technology. (Col. 1, ll. 46-49; col. 2, ll. 61-63.)

#### PRINCIPLES OF LAW

All timely filed evidence and properly presented arguments are considered by the Board in resolving an obviousness issue on appeal. *See In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984).

In the examination of a patent application, the Examiner bears the initial burden of showing a *prima facie* case of unpatentability. *Id.* at 1472. When that burden is met, the burden then shifts to the Applicant to rebut. *Id.*; *see also In re Harris*, 409 F.3d 1339, 1343-44 (Fed. Cir. 2005) (finding rebuttal evidence unpersuasive). If the Applicant produces rebuttal evidence of adequate weight, the *prima facie* case of unpatentability is dissipated. *In re Piasecki*, 745 F.2d at 1472. Thereafter, patentability is determined in view of the entire record. *Id.* However, on appeal to the Board it is the Appellant's burden to establish that the Examiner did not sustain the necessary burden and to show that the Examiner erred. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) ("On appeal to the Board, an applicant can overcome a rejection [for obviousness] by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness.") (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)).

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734 (2007).

In *KSR*, the Supreme Court reaffirmed that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* at 1739. The Court explained:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

*Id.* at 1740. The Court also explained that:

[o]ften, it will be necessary . . . to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.

*Id.* at 1740-41.

"[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d at 988. "To facilitate review, this

analysis should be made explicit." *KSR*, 127 S. Ct. at 1741. However, "the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ."

*Id.*

The Supreme Court noted that "[i]n many fields it may be that there is little discussion of obvious techniques or combinations, and it often may be the case that market demand, rather than scientific literature, will drive design trends." *KSR*, 127 S. Ct. at 1741. "Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." *Id.* at 1742. The Court also noted that "[c]ommon sense teaches . . . that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id.* at 1742. "A person of ordinary skill is also a person of ordinary creativity, not an automaton." *Id.*

During examination of a patent application, a claim is given its broadest reasonable construction consistent with the specification. *In re Prater*, 415 F.2d 1393, 1404-05 (CCPA 1969). "[T]he words of a claim 'are generally given their ordinary and customary meaning.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (internal citations omitted). The "ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1313.

## ANALYSIS

Appellant contends that the Examiner erred in rejecting claims 1-64. Reviewing the record before us, we do not agree. In particular, we find that the Appellant has not shown that the Examiner failed to make a *prima facie* showing of obviousness with respect to claims 1-64. Appellant failed to meet the burden of overcoming that *prima facie* showing.

### *§ 103 Rejection - Karamon/Oltman*

We select claim 1 as representative.<sup>5</sup> Appellant argues that Karamon and Oltman fail to teach or suggest a wireless transmitter connected to a supplemental audio content player and a wireless receiver connected to an earphone worn by a movie patron that has operating characteristics to avoid interference with respective supplemental audio content systems for other cinemas of a cineplex (App. Br. 7-9; Reply Br. 2-5), and further argues that there is no proper motivation to combine the teachings of Karamon and Oltman, that Oltman teaches away from Karamon and that the Examiner used impermissible hindsight reconstruction (App. Br. 10-11). We do not agree.

The Examiner found that Karamon discloses every limitation in claim 1 except for wireless transmission of audio through the use of a wireless transmitter and receiver. (Ans. 4, 19; *see also* FF 1.) Although Karamon discloses that audience members may have listening devices, Karamon does not further describe the nature of these devices as being either wired or wireless. (FF 1.) The Examiner found that wireless headphones were well known in that art and that Oltman discloses a wireless headphone

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<sup>5</sup> See 37 C.F.R. § 1.192(c)(7) (2003).

system with a transmitter and receiver in the same environment. (Ans. 4, 19, 22-23; *see also* FF 2.) Thus, the combination of Karamon and Oltman teaches or suggests a wireless transmitter connected to a supplemental audio content player and a wireless receiver connected to an earphone worn by a movie patron, as claimed.

The Examiner reasoned that it would have been obvious to modify the system of Karamon with a wireless headphone system, such as that disclosed by Oltman. (Ans. 4, 19, 22-23.) We agree with the Examiner's reasoning, and find no improper hindsight reconstruction, teaching away, or improper motivation used to combine the references. Indeed, the claimed invention is nothing more than the combination of familiar elements according to known methods, with no unpredictable results. *See* KSR, 127 S. Ct. at 1739. The Appellant's arguments concerning the method of operation of Oltman being incompatible with Karamon (App. Br. 10-11) are not convincing, because, as the Examiner explained (Ans. 19-23), Oltman is not being bodily incorporated into Karamon but rather is being used to show that wireless communications systems were well known in the art and the application of a wireless communication system in Karamon would have been obvious.

Appellant further argues that Oltman does not disclose avoiding interference with respective supplemental audio content systems for other cinemas of a cineplex, as claimed. (Reply Br. 2-4.) In particular, Appellant contends that the system of Oltman would not work in a cineplex having multiple cinemas because the system of Oltman operates by selecting a DSSS channel based upon a radial distance of the wireless headphone from the front of the main loudspeaker system in a single venue. (Reply Br. 2-4.) Therefore, according to Appellant, interference would be caused when there

are multiple front loudspeaker systems in multiple venues. (Reply Br. 4.) We do not agree.

Initially, we note that the plain language of the claim does not specify the nature of any other supplement audio systems in any other cinemas of the cineplex. In other words, there is no requirement that other supplemental audio content systems for other cinemas be wireless systems, or that they have any other particular characteristics, such as using DSSS. Furthermore, the Specification teaches that:

*The spread spectrum may be either direct sequence [i.e., DSSS] or frequency hopping as will be appreciated by those skilled in the art. As will also be appreciated by those skilled in the art, multiple such spread spectrum communications links can be operated adjacent one another . . . without causing undesirable mutual interference.*

(Spec. 17:6-13 (emphasis added).) In other words, an interpretation that a wireless system using DSSS, such as that disclosed by Oltman, has operating characteristics that avoid interference with other systems is not inconsistent with the Specification. Moreover, Oltman teaches that those skilled in the art know how to select frequency channels based upon the particular venue (FF 2) and, therefore, suggests that those skilled in the art would know how to select frequency channels to avoid interference with other similar systems operating in close proximity. Indeed, it would have been common sense to select frequency channels of one supplemental audio system to avoid interference with other supplemental audio systems in close proximity.

Accordingly, we conclude that Appellant has not shown that the Examiner erred in rejecting claim 1 under 35 U.S.C. § 103(a). Claims 2-13,

15-27, 29-43, 51-61, and 63-64 were not argued separately, and fall together with claim 1.

*§ 103 Rejection - Karamon/Oltman/Denenberg*

We select claim 44 as representative.<sup>6</sup> Appellant argues that Denenberg, which was cited by the Examiner for the teaching of an infrared wireless headset (Ans. 16; *see also* FF 3), does not cure the alleged deficiencies of Karamon and Oltman discussed with respect to claim 1. (App. Br. 13.) We do not agree for the reasons previously discussed with respect to claim 1.

Accordingly, we conclude that Appellant has not shown that the Examiner erred in rejecting claim 44 under 35 U.S.C. § 103(a). Claims 14, 28, 45-50, and 62 were not argued separately and fall together with claim 44.

**CONCLUSION OF LAW**

We conclude that Appellant has not shown that the Examiner erred in rejecting claims 1-64 for obviousness under 35 U.S.C. § 103.

**DECISION**

The rejection of claims 1-64 for obviousness under 35 U.S.C. § 103 is affirmed.

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<sup>6</sup> See 37 C.F.R. § 1.192(c)(7) (2003).

Appeal 2007-3806  
Application 09/896,894

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

KIS

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